

## Arizona Weekly Industrial Review

Tucson—The American Smelting & Refining Co. have bought the Silver Bell Mine, smelter and railroad near here.

Glendale—\$40,000 crop of cantaloupes has been raised by Jap farmer near here.

Tucson—The construction of temporary barracks to house the men of the next training camp for skilled mechanics to be held at the University of Arizona will be concluded shortly.

El Paso, Tex.—Alcohol used for the manufacture of munitions made from desert cacti.

Parker—Employees of copper companies in the Globe-Miami district have been granted a further increase of 25 cents per day beginning August first.

Prescott—The 4th well of the Arizona-Oklahoma is proving equal to No. 2.

Mesa—Preliminary work started on the new postoffice building.

Jerome—Home Oil Company's well down 600 feet with a good showing.

PHOENIX—\$12,000 to \$15,000 damage by the canal systems by the recent flood.

Chandler—The cotton crop of the Salt River valley is 96 per cent perfect, output 40,000 bales the approximate value being \$14,000,000.

Holbrook—The operations of the Hopi Oil Company delayed on account of severe storm. One carload of drilling machinery for the Adama-na company has reached here. Mail service twice a week between Holbrook and Young granted.

Phoenix—Maricopa county has the highest administration cost, \$1,338, 093.

Chandler—The first car of peaches ever shipped from here left last week. At the 410 foot level the South Verde Consolidated struck rich ore body.

Ray—Great damage done here by flood starting down the channel of Mineral creek.

Pinal county gained the record in the twelfth federal reserve district for the highest oversubscription to the Third Liberty Loan with 1308.86 per cent.

Mesa—Cotton experts here are studying the condition at Mesa ranch. New lighting system for streets being paved guaranteed.

Safford—The Bunker Hill Copper Co. is showing good samples of gold and silver ore.

Tombstone—Operations at the Tejon mine increased, the output being 50 tons per day.

Mesa—Mormon temple similar to the Salt Lake Temple is being planned. Yuma—Negotiations in connection with the irrigation systems of Imperial Valley and Laguna Dam are practically completed.

Globe—The most important ore development of the past year was made at Copper Hill.

Bisbee—The Y. W. C. A. building is completed and now occupied.

One hundred thousand college men will be training for officership in a few months, according to the program perfected by the western university managers and military officials. They're coming, Father Woodrow!

The Kaiser loquiter: "Where do we go from here?"

## "THE FIGHTING TRAIL"

Episode 5—"Torrent Rush"

(Continued from the last issue)

Gwyn rushed from the room and out through the door. Nan stood, as if she were dazed. The dawn was beginning to cast a thin gray shadow in the sky, and shone as a mist through the tops of the trees. Around the hut and in the thick stretch of trees it was still dark. As Gwyn threw himself upon a horse, ready saddled, and prepared to ride out to the trail, Nan rushed from the hacienda and mounted another. They did not speak a word, but clattered off toward the trail at top speed.

Meantime, Yaqui Joe, faithful to his trust, had ridden bravely after the brigands and, as it transpired into the very jaws of death. When he mounted his pony and started after the gang it was easy for him to pick up and follow their trail. He rode rapidly for nearly five miles and then, his practiced eye noting that the others had stopped their horses, apparently to hold a conference, he suddenly dismounted, tethered his horse and began cautiously to advance on foot.

The Indian had gone only a sparse one hundred yards when suddenly the huge form of Shoestring Drant came hurtling from the brush on a rising at the right hand side of the road. He landed squarely on Joe's shoulders, bearing him to the ground and knocking his rifle from his hand. Von Bleck, Cut-Deep and two other men quickly joined him. Joe struggled manfully, but in vain. The odds were too great for him and it was a matter of only a few seconds for the outlaws to make him a captive.

Then began the torture that showed the depths of fiendishness that lay in Cut-Deep Rawls and Shoestring Drant. Joe was bound fast to the trunk of a tree, his hands cutting into his flesh so that he winced from the pain. But he made no outcry. Rawls demanded that Joe, as the price of his liberty reveal the location of the mine. The Indian made no sign. Rawls struck the man a blow in the face. Again he made his demand. Again Joe was silent and Rawls, his anger welling up like a torrent, showered blow after blow on his victim until even rugged Yaqui failed under the brutal attack and he passed into unconsciousness, his body sagging limply.

Rawls turned away. To Drant he said:

"You and the others stay here and see what you can get out of this bull-headed coyote—Von Bleck and I will return to Ybarra's and hunt for the other half of this infernal map."

He and Von Bleck mounted and rode away and Shoestring gave his attention to Joe, who, weakened though he was, revived in a few moments.

Shoestring took up the torture where Cut-Deep had stopped, but beating still failed to make the Indian betray his master's secret. Enraged, Shoestring drew his revolver and deliberately shot off the robe of the Indian's right ear. Still Joe remained silent. Drant then drew forth a long-bladed hunting knife and, with cruelty unbelievable, began plunging it into the flesh of Ybarra's faithful servant, and soon blood was streaming from a score of wounds in Joe's arms, legs, neck and chest. When this failed to unseal his lips, Drant ordered his men to build a fire beneath the feet of

their victim.

Joe by this time was almost beyond could do now would add any more to his suffering. He was fast sinking into unconsciousness from loss of blood.

But the malignant Drant was determined and he personally applied the fire that was to make Joe divulge his secret. The latter had slipped into unconsciousness again, but Drant depended on the fire to bring him back to life and confession. The outlaw had just lifted a burning brand and was letting the flames play on the soles of Joe's feet when a shot rang out. Startled, he swept the valley in a quick, all-embracing look, then leaped to his feet. He started to the trail where he had left a man on guard and his other followed with him, leaving the dying Yaqui alone.

Arriving on the trail, Drant and his companion discovered their sentinel in a death grip with Gwyn. He and Nan had descended into the canyon on its farthest slope by means of a rope which Gwyn took from a well on the side of the trail. Tying one end to the pommel of his saddle and taking Nan's rifle he had descended to the bottom of the canyon and she, refusing to be left alone, had followed. They crossed the bed of the canyon unobserved by Drant's sentry and climbed up the other side to the trail. Gwyn was almost upon the guard before the latter saw him and fired. He misses and Gwyn leaped on him, Nan then taking a short cut to the point where Joe had been left to die.

Drant and his companion lost not a moment in going to the rescue of Gwyn's antagonist. Each tried to bring their weapons into play, but could not. The struggling pair moved so rapidly they dared not take a pair leaped on Gwyn, but he fought like a tiger. He engaged the three singly and together. A dozen times they swayed to the edge of the trail and it seemed as though all must plunge to death. But they did not. Finally, catching the guard around the waist, Gwyn hurled him over the brink and to death. The other man leaped down soon afterward, breaking his neck as he struck the rocks below.

Fearing a similar fate, Drant fled down the trail, intending to return and finish Joe before Gwyn could rescue him. As he approached, Joe, who had been released by Nan, rose from the ground and fired. Nan did likewise. Drant, his fury turned on the girl, fired at her. But Joe had anticipated him and leaped in front of Nan, talking in his own heart the bullet that was intended for her. Drant disappeared in the brush as Joe fell, dying, to earth. Nan was quickly bending over the mortally wounded servant and raised his head to her lap as Gwyn came running up. They realized that Joe's valiant life was near its end.

Suddenly the old, wrinkled face of the faithful Yaqui brightened. His eyes lighted for an instant, his lips parted, a whisper came forth. They bent low to hear. He spoke:

"Joe no tell."

They were his last words. His head fell back, his face relaxed. He was dead.

Tenderly, Gwyn raised the poor,

## SOME ELECTRIC STARTING HISTORY

"Nearly every car owner knows that Mr. T. A. Willard had a great deal to do with the starting battery," says Mr. Nicholas chief electrician of the Western Machinery Company, Electrical and Storage Batteries Service Station, on East Washington, but only a few know of the part he took in making electric starting and lighting practical for automobiles.

"Long before electric lighting was seriously considered, Mr. Willard had perfected a battery for lighting railway coaches and was familiar with every detail of the system. This was in the days when all motor cars were 'auto's' and had to be 'wound-up'—when acetylene lights were the best to be had, and the spark came from a set of dry batteries.

"Electricity had one big job on the automobile that it didn't have on the Pullman—that was starting. As starting even with the most economical motor took considerable current the battery had to be kept well charged.

"One of Mr. Willard's biggest jobs in automobile starting and lighting was to make a generator that would keep the battery 'on charge' all the time except when the engine was going very slowly. He developed the extra-brush system of regulation which regulates the charging of the engine regardless of the engine speed.

Another important thing Mr. Willard did was to help perfect the small low-voltage lamps that are used for head and tail lights and for light on the dash. He not only advocated low-voltage lamps, but proved that better results were possible with 6 or 12 volt systems than with the earlier 24 volt systems. The higher voltages are now rarely found.

The most recent and perhaps the greatest contribution Mr. Willard ever made to automobile electric lighting is the Threaded Rubber Insulation. By this invention the use of durable, long lived rubber insulation in automobile starting and lighting batteries was made possible for the first time. In a way that was characteristic of Mr. Willard's ingenuity he solved the problem of inserting nearly 200,000 tiny threads in each one of the battery insulators.

blood-run body in his arms. Followed by Nan he carried his burden to a point deep in the canyon and laid it in a rocky grave, piling rocks high over it so that coyotes or vultures should not get to it. Then they began to ascend the cliff, Nan softly weeping as they went. Half way up the trail, Gwyn halted, his eyes riveted on something deep down the valley. Taking careful aim, Gwyn fired one shot from his rifle and an instant later Drant's white pony went to earth, shot through the head, and his rider went flying through the air. Nan restrained Gwyn as he raised his rifle to fire at Drant.

Now Gwyn and Nan moved hurriedly into the canyon. Drant, who had by now reached the upper trail where their horses stood, mounted Nan's horse and rode swiftly off, seeking Von Bleck and Rawls.

When Gwyn and Nan reached the dangling ropes that had borne them to the canyon bed, they were confronted by the problem of getting to the top again. Gwyn thought first of climbing up himself and then pulling Nan up, but the danger of battering her against the rocky walls of the canyon caused him to dismiss the plan. He had a sudden inspiration. Tying the rope securely about the middle of Nan's rifle, he ordered her to sit on one side of it and he sat upon the other. Then he tugged at the rope until the strain put fear into his horse and the frightened beast started on a mad gallop along the trail. As he ran he pulled Gwyn and Nan to the top of the canyon.

When they reached the top, Gwyn replaced the rope in the well and he and Nan went in search of their mounts. Only Gwyn's was to be found and then they realized how Drant had got away. Lifting Nan into the saddle, Gwyn then got on back of her and they started for the hacienda.

Dusk was beginning to unfold its thin, blue veil over the solemn peaks of the Sierras. The shadowy outlines of the tree-tops stretching hazily away over the mountains looked like a thousand tombstones in the growing darkness. The thick silence about the little house that had been Don Carlos' home seemed to emphasize the vastness and solitude of the hills. It was just fourteen hours. From the windows of the hacienda the low flickering nervous rays of candle-light cast their yellow brightness into the darkness. Inside, lounging comfortably in the living room, were three men conversing seriously in low, scarcely audible voices. They were Karl Von Bleck, Shoestring Drant and Cut-Deep Rawls. Von Bleck was leaning forward in his chair, a worried, unnatural expression on his countenance. Drant was talking, and as he spoke he mopped the perspiration from his forehead with a filthy handkerchief. It was evident that he had entered but a moment before, and his excited tones as words fairly tumbled from his lips, denoted that he was reporting news of weighty importance. Drant's eyes were fixed upon Von Bleck.

"Where's the Indian?" Von Bleck fairly shouted. "I don't care a hang how long you fought, I want to know where the Indian is. We didn't find the chart here and he knows where it is. That's all I care about. Where is he?"



The picture you send him. He will wear it next his heart; it means that much.

KODAK FINISHING

F. H. M'CLURE  
Kingman, Arizona

## Toilet Articles



for the bath and dressing table you will always find pure and high grade at Watkins'. Our fine soaps suit the most delicate skins, and our creams and lotions for sunburn, tan and freckles are soothing and efficacious. For the babies our powders are a delight when bought at Watkins'.

H. H. WATKINS

On account of the shortage of automobiles in England it is announced that the use of horses is resuming something of its old-time popularity in London. Are the horses kicking? Neigh, neigh.

Why not march the war song writers along the western front?

The Austrians have not had any luck in war for the last 300 years. And the outlook is that they haven't changed their luck any. The country of Emp. Chas. is too much of the rubber stamp sort to amount to anything.

The flag is still flying over the wheat and the sugar bins.



## What The Packers Do For You

Not very many years ago in the history of the world, the man that lived in America had to hunt for his food, or go without.

Now he sits down at a table and decides what he wants to eat; or his wife calls up the market and has it sent home for him. And what he gets is incomparably better.

Everyone of us has some part in the vast human machine, called society, that makes all this convenience possible.

The packer's part is to prepare meat and get it to every part of the country sweet and fresh—to obtain it from the stock raiser, to dress it, cool it, ship it many miles in special refrigerator cars, keep it cool at distributing points, and get it into the consumer's hands—your hands—through retailers, all within about two weeks.

For this service—so perfect and effective that you are scarcely aware that anything is being done for you—you pay the packers an average profit of only a fraction of a cent a pound above actual cost on every pound of meat you eat.

Swift & Company, U. S. A.



## ARE YOU PROTECTED CAR OWNERS?

Case  
Chalmers  
Chandler  
Chevrolet  
Dodge  
Dort  
Franklin  
Haynes  
Hupmobile  
Jeffery  
Jordan  
King  
Kissel Kar  
Marmon  
Maxwell  
Mitchell  
Moline-Knight  
Overland  
Packard  
Paige  
Reo  
Saxon  
Studebaker

Look down the list of cars at the left. Does the name of your car appear there?

If so, it has an ignition system, starter, generator or storage battery manufactured by one of the concerns listed at the right.

Just remember that this electrical equipment is not guaranteed by the company who made the car, nor the concern who sold it to you. But it is guaranteed by the manufacturer of the equipment through us.

We are the authorized representatives for these manufacturers. They appointed us to serve you, to carry a complete stock of parts, and to keep this equipment in repair for you.

If any garage or electrical station other than this authorized Service Station works on this equipment, it invalidates the guarantee. For your own protection then, come to us for service, adjustments or repairs on the electrical equipment on your car.

A hearty welcome awaits you.

Bijur:  
Starter  
Generator  
Dyneto:  
Starter  
Generator  
Eiseman:  
Ignition  
Autolite:  
Starter  
Generator  
Northeast:  
Starter  
Generator  
Ignition  
Westinghouse:  
Ignition  
Starter  
Generator  
Splittorf:  
Ignition  
Starter  
Generator  
Apelco:  
Starter  
Generator  
Atwater-Kent:  
Ignition  
Connecticut:  
Ignition  
Willard:  
Storage Battery

Western Machinery Company  
Willard Service Station  
Kingman, Arizona